



MIL-DTL-55302/158C

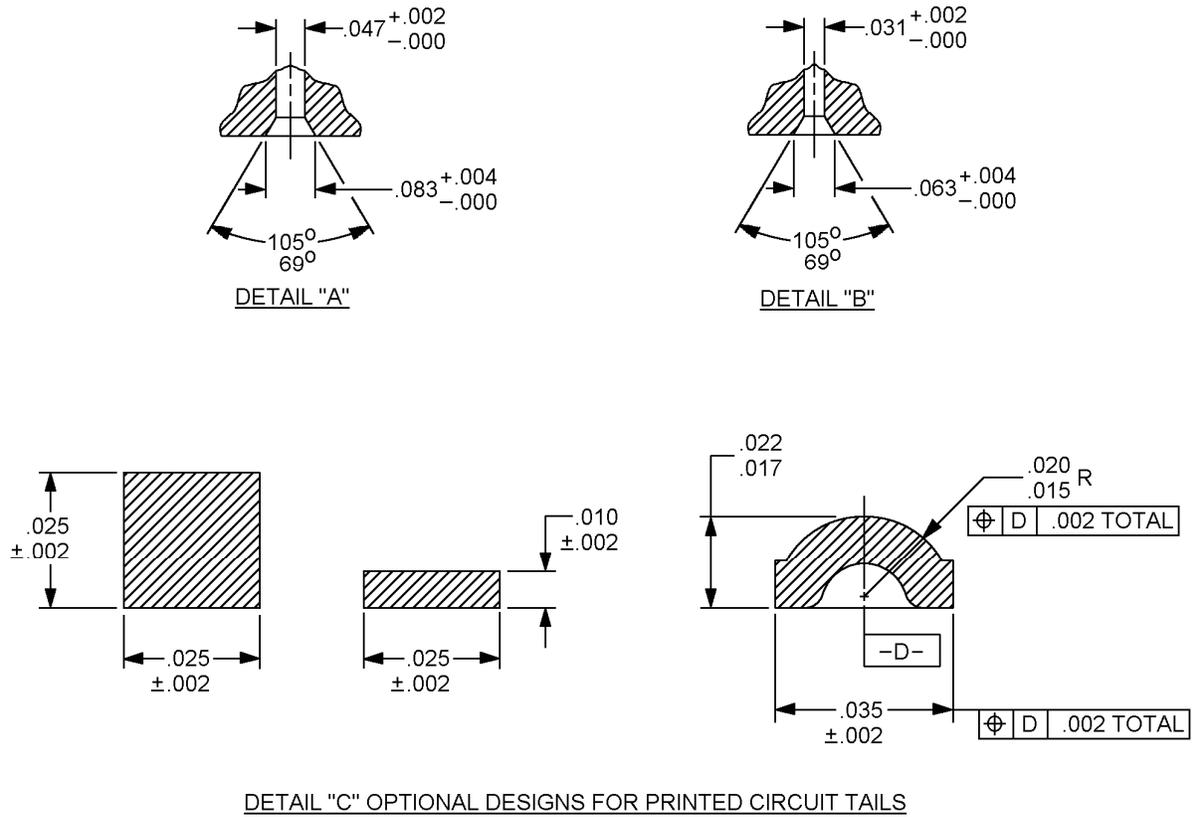


FIGURE 1. Connector, receptacle, .100 (2.54 mm) spacing – Continued.



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Dash number M55302/158-	Number of contacts	Type of termination
01	96	Printed circuit tails <u>1/</u>
02	64	Printed circuit tails <u>2/</u> <u>1/</u>

1/ Solder contact suitable for .062 or .093 thick printed wiring boards.

2/ These connectors have middle row (row B) of contacts excluded.

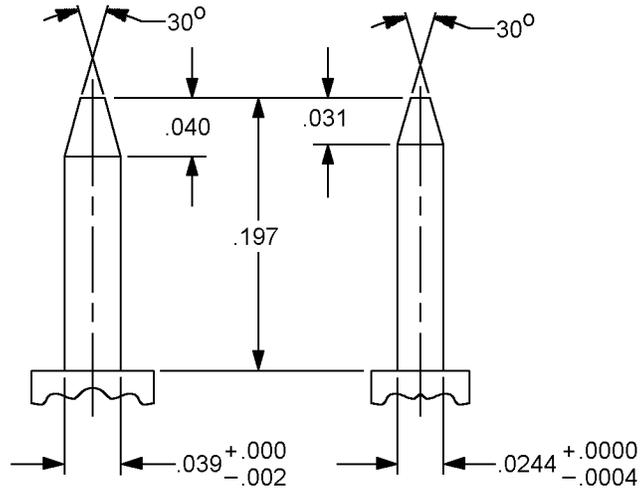
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	.05	.020	.51	.047	1.19	.110	2.79	.400	10.16
.004	.10	.022	.56	.054	1.37	.122	3.10	.418	10.62
.005	.13	.024	.61	.063	1.60	.200	5.08	.735	18.67
.006	.15	.025	.64	.066	1.68	.209	5.31	3.100	78.74
.008	.20	.031	.79	.083	2.11	.236	6.00	3.342	84.89
.010	.25	.035	.89	.100	2.54	.260	6.60	3.500	88.90
.015	.38	.040	1.02	.102	2.59	.335	8.51	3.701	94.01
.017	.43	.041	1.04	.104	2.64				

NOTES:

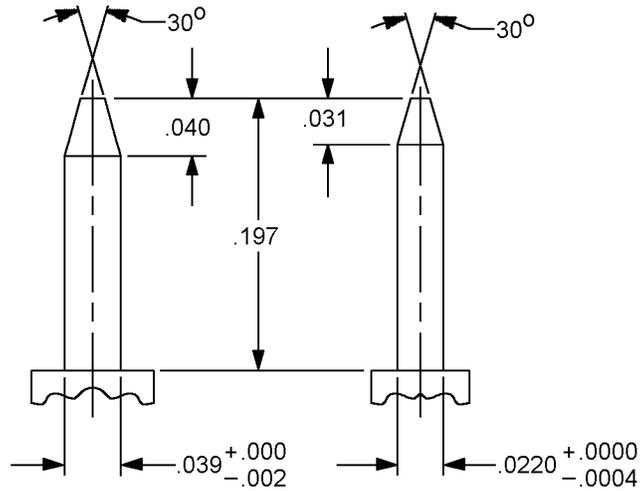
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is  $\pm .005$  (.13 mm).
4. These connectors mate with connectors specified in MIL-C-55302/157.
5. Clearance must be provided around the top of the mounting hole for 2.5 mm hex nut.
6. Slots, openings, indentations etc. that fall within the envelope dimensions and which do not affect form, fit or function are acceptable providing they do not prevent intermateability and are not used for polarizing purposes in military applications.

FIGURE 1. Connector, receptacle, .100 (2.54 mm) spacing – Continued.

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TEST PIN A

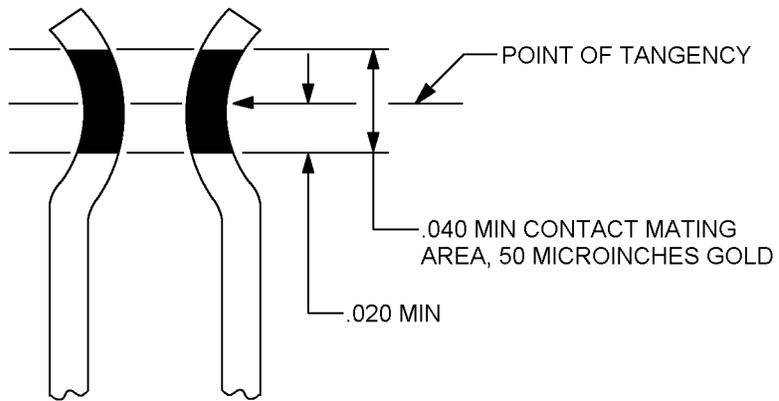


TEST PIN B

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are  $\pm .008$  (0.20 mm) on decimals and  $2^\circ$  on angles.

FIGURE 2. Test pins.



Inches	mm
.020	0.51
.040	1.02

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

FIGURE 3. Contact plating.

## REQUIREMENTS

Design and construction:

Dimensions and configuration: See figure 1, 2, and 3.

Material and finish:

Contact plating: The plating in the contact area shall be gold in accordance with ASTM B488, type II, code C or D, class 1 over nickel plating in accordance with SAE-AMS-QQ-N-290, 30 to 150 microinches. The contact mating area is defined on figure 3.

Nonfunctional area: Any portion of the contact other than the contact mating area or termination area can be plated in accordance with MIL-DTL-55302.

Contact identification: See figure 1.

Body design: The insulator body of each receptacle may be two-piece construction secured by mechanical means.

Contact separation force: Separation force shall be .5 ounce minimum, using the following test pins:

1. Insert and withdraw test pin A (see figure 2).
2. Insert test pin B (see figure 2) fully and withdraw test pin B .071 inch and then measure separation force.

Mating and unmating: The maximum mating force, in pounds, shall not exceed a value equal to 0.25 times the number of contacts, and the withdrawal force, in pounds, shall be a minimum of 0.025 times the number of contacts and shall not exceed the measured insertion force, when the housing is loaded with contacts and mated with connector in accordance with MIL-C-55302/157.

Contact rating: 3.0 amperes maximum per contact.

Contact resistance: No individual contact pair shall have a resistance exceeding .020 ohm.

Contact retention: 3 pounds minimum per contact.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 50 or 60 hertz.

High altitude: 300 volts rms, 50 or 60 hertz.

Part or Identifying Number (PIN): M55302/158- (dash number from figure 1).

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

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Referenced documents. In addition to MIL-DTL-55302, this document references the following:

MIL-DTL-55302/157  
ASTM B488  
SAE-AMS-QQ-N-290  
MIL-DTL-55302/131

CONCLUDING MATERIAL

Custodians:

Army – CR  
Navy – EC  
Air Force – 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-4503-000)

Review activities:

Army – AR, AT, AV, CR4, MI  
Navy – AS, MC, OS, SH  
Air Force – 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.